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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/687,462

10/16/2003

David M. Drouin

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01/09/2006

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EXAMINER

MERCEDES, DISMERY E

ART UNIT

PAPER NUMBER

2651

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/687,462

Applicant(s)

DROUIN, DAVID M.

Examiner

Dismery E. Mercedes

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2005 and 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 10/28/2005 have been fully considered but they are not persuasive.
2. Regarding Claims 1 & 2 in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Wu et al. discloses detecting a write fault in a particular sector, skipping a predetermined number of sectors and resume writing at another sector (see figs.3-4). Aoki discloses a method of executing a write retry operation when it detects that an error has occurred within that particular sector within an allowable time limit (see page 3, 0036-0043). Now, at the time of the invention a person of ordinary skill in the art would have recognized that executing a retry operation (fig.4, as disclosed by Aoki) within an allowable time limit (i.e. to limit the number of retries) implemented in a method as disclosed by Wu et al., wherein once the recording is complete, a clock (i.e. CPU) would trigger the retry operation of the remaining sectors (i.e. the defective and any skipped sectors), would provide such method as disclosed by Wu et al. with enhanced capability of a control function of performing read/write retry operation when an error has occurred at a particular sector, as well as controlling the number of retries (see abstract). Therefore, in light of the above discussing, the examiner believes the combination of Wu et al. in view of Aoki is proper.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (US 6,384,997 B1), in view of Aoki (US 2001/0010605).

As to Claim 1, Wu et al. discloses a method for writing data on a number of sectors of a track of a disk drive (FIG.1, "10", "12") that comprises: sending a signal to write data on a first sector of the track (col. 3, lines 58-60, sending a signal to write data is inherent in Wu's write operation, note col. 3, lines 65-67, that writing occurs on a sector of a disk); receiving a write data fault (col. 3, lines 60-62); sending a signal to write data on another sector of the track after skipping a predetermined number of sectors (col.3, line 64 - col. 4, line 10); waiting for the first sector to be in position again (col.4, lines 7-14 and 42-47);

Wu et al. fails to particularly disclose sending a signal to retry to write data on the first sector if a predetermined number of retries to write data on the track has not been exceeded.

However, Aoki discloses such (page 3, [0036-0039, 0043]). Therefore it would have been obvious to one of ordinary skill in the art to modify Wu et al's method by implementing a retry operation as disclosed by Aoki, the motivation being because it would provide Wu et al.'s method with the enhanced capability of enabling a secured constant data transfer rate from a disk to the host system by providing the system with a retry operation when an error occurs on a particular data sector (page 2, [0013] and page 3, [0039-0043], and abstract).

As to Claim 2, has limitations similar to those treated in the rejection of claim 1, are therefore met by the references as discussed above. Claim 1, recites however "red data fault" instead of a 'write data fault', Aoki is relied upon for disclosing such (page 2, [0029,0032,0036,0039]).

As to Claim 3, Aoki further discloses wherein the predetermined number of sectors to skip is zero (0) ([0042,0044]).

As to claim 4, Wu et al. further discloses the predetermined number of sectors to skip is 1, 2 or more (col.3, line 67-col.4, line 7).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Dobbeck et al. (US 6,185,058 B1); Russell (US 6,426,928 B1); Rothberg et al. (US 6,327,106); Ando et al. (US 6,385,744 B1).

Art Unit: 2651

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dismery E. Mercedes whose telephone number is 571-272-7558. The examiner can normally be reached on Monday - Friday, from 9:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dismery E Mercedes  
Examiner  
Art Unit 2651

DM



✓  
DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600